



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,972	09/26/2005	Joachim-Rene Nuding	2003P0462WOUS	1663

7590 05/15/2008  
Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
----------

CASAREGOLA, LOUIS J

ART UNIT	PAPER NUMBER
----------	--------------

3746

MAIL DATE	DELIVERY MODE
-----------	---------------

05/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/550,972

Applicant(s)

NUDING ET AL.

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☒ Claim(s) 15-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

### ***Objections To Claims***

Claims 15-28 are objected to under 37 CFR 1.75(a) for the following reason:

All claims include the expression "calculated by the measured temperature"; see the last two lines in each of independent claims 15, 19 and 20. The cited expression is awkward and confusing since a temperature cannot perform a calculation. The phrase "calculated by" should consequently be replaced with "calculated based on", "calculated as a function of", or some other equivalent language.

### ***Claim Rejections - 35 USC 112***

Claims 23, 24 and 27 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Reference to "the temperature" in the first line of each claim is vague and ambiguous. Parent claim 20 mentions several temperatures and it is not clear which temperature is referred to by the cited language in dependent claims 23, 24 and 27.

***Claim Rejections - 35 USC 102***

Claims 15-28 are rejected under 35 USC 102(b) as being anticipated by Kataoka et al.

All elements of the claimed gas turbine liquid injection and temperature measuring apparatus are present in prior art liquid injection systems of the type disclosed by Kataoka. Attention is called for example to the gas turbine system in Kataoka's Figure 1; note liquid (water) injector 11, compressor 1, combustion chamber 2, turbine 3, and air temperature measuring device 21 located upstream of the liquid injector. With regard to claims 16, 21 and 22, attention is also called to Kataoka's humidity measuring device 22 (claims 16 and 22), and Kataoka's turbine outlet temperature measuring device 24 (claim 21).

It is further noted that the claims state "the temperature of the air stream at the inlet of the compressor is calculated by [calculated as a function of] the measured temperature"; see the last two lines of claims 15, 19 and 20. The cited expression does not add any structural limitations to the claimed apparatus, but rather, merely describes an intended use or operational step involving the temperature measured by the claimed temperature measuring device. If the temperature measured by the claimed measuring device can be used in this manner, the equivalent temperature measured by Kataoka's sensor 21 can be used in the same manner. It is additionally pointed out that the material added by claims 17, 18, 23-25, 27 and 28 is likewise a matter of intended use,

Art Unit: 3746

and the prior art system disclosed by Kataoka is equally capable of being used in the same way.

***Additional References***

Horii et al is cited as disclosing a further pertinent example of a gas turbine water injection system that includes temperature and humidity sensors upstream of its water injector.



L. J. Casaregola  
571-272-4826 (M-F; 7:30-4:00)  
571-273-8300 FAX  
May 8, 2008

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Devon Kramer, can be reached at 571-272-7118.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).